

REPORT.

SEC. I. *Geological Examination of Kent Co.*

The next in the order of surveys that remained to be accomplished on the E. S. of Maryland was that of Kent county, the result of which will be given, for the present, in reference to its physical geography, the character of its soil, and its mineral resources.

This county is embraced within an area of about 332 square miles comprising upwards of 223 thousand acres; and although one of the smallest, was at one time considered among the most productive in the State. It lies between two rivers—the Chester and the Sassafras—that are navigable for schooners, nearly their whole length, or almost to the boundary line separating the county from the State of Delaware, on the east; whilst its western limits are formed by the Chesapeake Bay. It is moreover intersected by numerous creeks, affording additional facilities for the transportation of its produce by a short and safe navigation to Baltimore, or by means of the Chesapeake and Delaware canal, to Philadelphia. The upper and middle portions of the county form an extensive nearly level plain, with a gradual descent to the S. W. towards the heads of the creeks that empty into the Chesapeake Bay, and about the mouth of Chester river; after which the country falls more abruptly, extending itself into necks of land that are lower, more uniformly level, and nearly encompassed by these creeks.

The tract of land usually denominated the Head of Chester, extending between this river and the Sassafras, and embracing the region about Black's cross roads, has always appeared even to the most superficial observer a most beautiful farming country. Its surface is gently undulating, and the soil which is loamy, with a substratum of clay, requiring no artificial modes of drainage, is easily cultivated, and as easily improved. In its present condition it is best fitted for the production of corn, rye, and oats, but by the use of lime, or of some of the mineral deposits which it embraces, and that will be presently described, might be made to yield full crops of wheat. It has been much despoiled of its timber, though there are still remaining bodies of very valuable woodland, consisting principally of oaks and hickory. This portion of the county is, moreover, represented to be very healthy. On the river sides of the tract of land now under consideration, the soil is more variable: thus, in travelling the road from Millington to Chestertown, for the first four miles the country is gently rolling, with a naturally good soil, being a clay-loam, sour, and in an unimproved condition. Between New Market and Chestertown the country is more hilly, soil clay-loam, very sour. On the side of the hills the soil is gravelly and ferruginous; the mixed green sand making its appearance in the gullies of the water-courses, overlaid by a highly ferruginous sand. From George-